

## ABSTRACT OF THE DISCLOSURE

A semiconductor device equipped with a fuel cell of the present invention includes a fuel cell and a semiconductor element, and the fuel cell  
5 includes an anode separator in which a flow channel for fuel is formed, a cathode separator in which a flow channel for oxidizer is formed, and a membrane electrode assembly interposed between the anode separator and the cathode separator. In the semiconductor device, the semiconductor element is formed on one of the principal surfaces of one separator selected from the anode  
10 separator and the cathode separator, and the semiconductor element and the selected separator are connected electrically. With this configuration of the semiconductor device equipped with a fuel cell, a more compact and versatile semiconductor device equipped with a fuel cell is provided.